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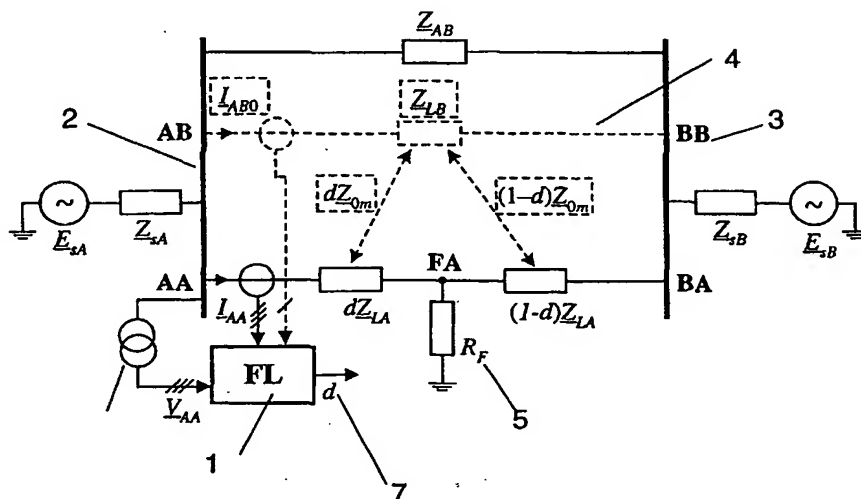
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(54) Title: **FAULT LOCATION USING MEASUREMENTS OF CURRENT AND VOLTAGE FROM ONE END OF A LINE**



(57) **Abstract:** A method to locate a fault from one end of a section of a power line (A-B). Measurements of current, voltage and angles between the phases are made at a first A end of a said power line section. Upon detection of a fault condition between said first end and a second end of said power line, distance to the fault is found by calculating symmetrical components of currents for said current and voltage measure at said first end, then calculating a distance  $d$  from said first end 2 to the fault F the distance  $d$  to the fault using a quadratic equation. A value for source impedance at the first and/or second end used in the method may be a representative value or a measured value. The invention may be applied to a single line or parallel lines. In other aspects of the invention a fault locator device for carrying out the method and a computer program for carrying out the method are described.